Leveraging Innovation Approaches to Stimulate Design Thinking

2023 WASHINGTON STATE GOVERNMENT LEAN TRANSFORMATION CONFERENCE

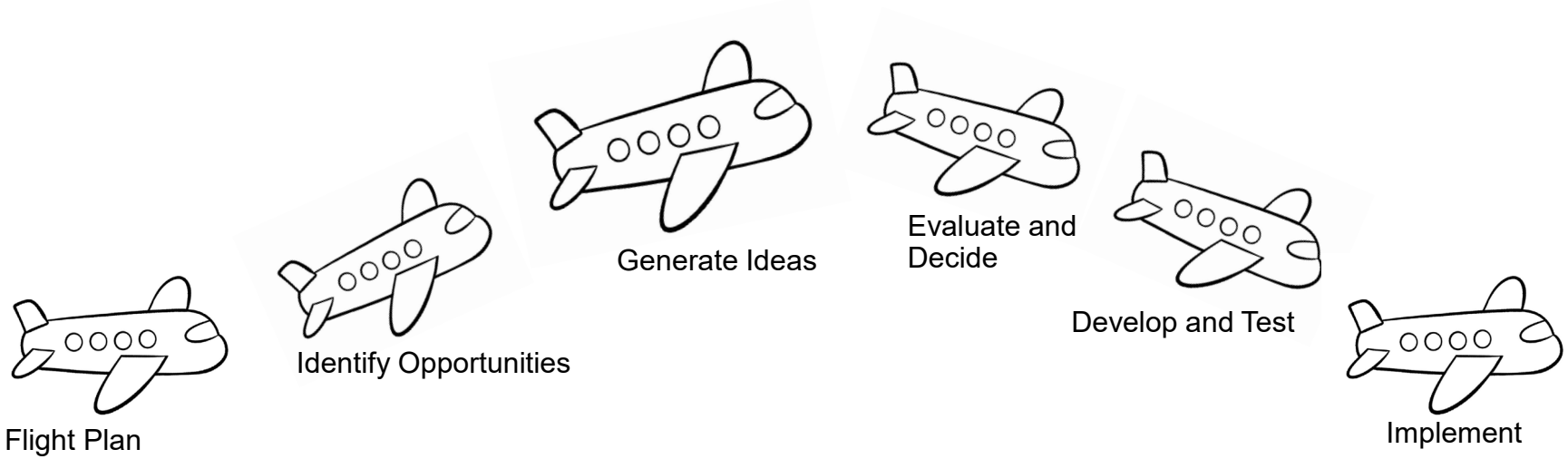
RESULTS WASHINGTON

Introduction

- Innovation and Design Thinking
- Generating Ideas
- Creative Thinking
- Evaluating and Selection
- Creating Pilot and Prototypes
- Individuals and Teams, including collocated and virtual teams.

Introduction

Photo from Articulate 360 Content Library



Introduction

What are Innovation and Design Thinking?

Challenges to Creativity

Creativity Myths

Steps to Innovation

Step to Design Thinking

Managing the Process

Why is Creative Thinking so Important?

Introduction

What is Innovation?
- Creating ideas
- Transforming ideas into outcomes

What is Design Thinking?
- Human Centered Approach
- Used for Problem Solving and Innovation

Innovation and Design Thinking = Creativity + Implementation

Introduction

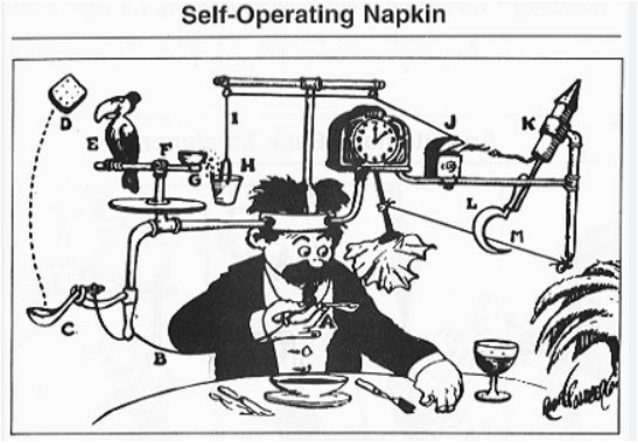
Challenges to Creativity

- Idea that there is only one way
- Focusing on what is wrong with a new idea
- Not taking the time to consider alternatives
- Bias that limits our thinking

Introduction

Creativity Myths

- Creative thinking is spontaneous
- Only certain people think creatively
- Creative solution are complex



https://en.wikipedia.org/wiki/Rube_Goldberg

Introduction

Steps to innovation

- Identify opportunities
- Generate ideas
- Evaluation and selection
- Development and prototype
- Implement and sustain

Introduction

Steps of Design Thinking:

- Empathize
- Define
- Ideate
- Design and Build Prototype
- Test

Introduction

Approaches to managing the process:

- Individual Progress
- Meetings
- Workshops

- Priming
- Activities

https://search.coolclips.com/m/vector/cart0660/Cartoon-woman-with-progress-chart/

Innovation Worksheet

A3 Innovation Tracking Worksheet

A3 Innovation Tracking Worksheet

Title: Owner: Coach:	Team:	Fresh eyes: Subject experts:	Start date: Follow up date:

PLAN

Identify Opportunities *(What is the problem or gap? Is there a case for change?)*

Root Causes *(What is causing the problem?)*

Generate Ideas: *(What are the variety of ways to resolve the issue?)*

Evaluate solutions: *(Voting results? Priority/Payoff results? Consensus built?)*

DO

Prototype or Pilot: *(What resolution can we try? What is the results of the testing?)*

Implementation Plan: *(What can we start or stop doing? Who? By when?)*

What	Who	When	Status

STUDY

Metrics: *(How will we test or measure if the resolution worked?)*

ACT/ADJUST

Follow-up Plan: *(Did the improvement plan work? What else can we try?)*

Stakeholder Signatures:

Innovation Worksheet

TIME	AGENDA ITEM	APPROACH/TOOL	FACILITATOR
	▪ **Opening/Set-Up** - Kick-off - Introductions - Ground rules and parking lot		
	▪ **Define Opportunities** - Review/define process - Identify problems/barriers - Identify root cause		
	▪ **Generate Ideas** - Prime for creativity - Brainstorm potential solutions - Assess potential solutions - Decide and build consensus		
	▪ **Develop and Test** - Create prototype or pilot - Test and evaluation		
	▪ **Action Plans** - Decompose and plan - Actions/accountability/next steps		

Introduction

Why is Creativity Important?

- Meet the needs of the customer
- Respond to competition
- Continuous improvement
- Creative development
- Growth for team and organization

Identify Opportunities

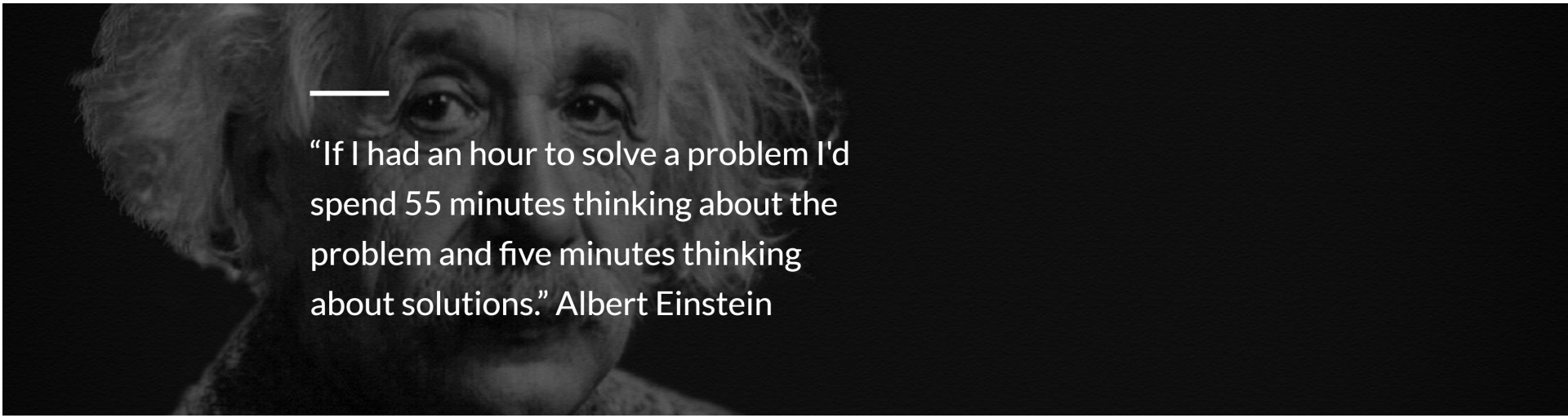
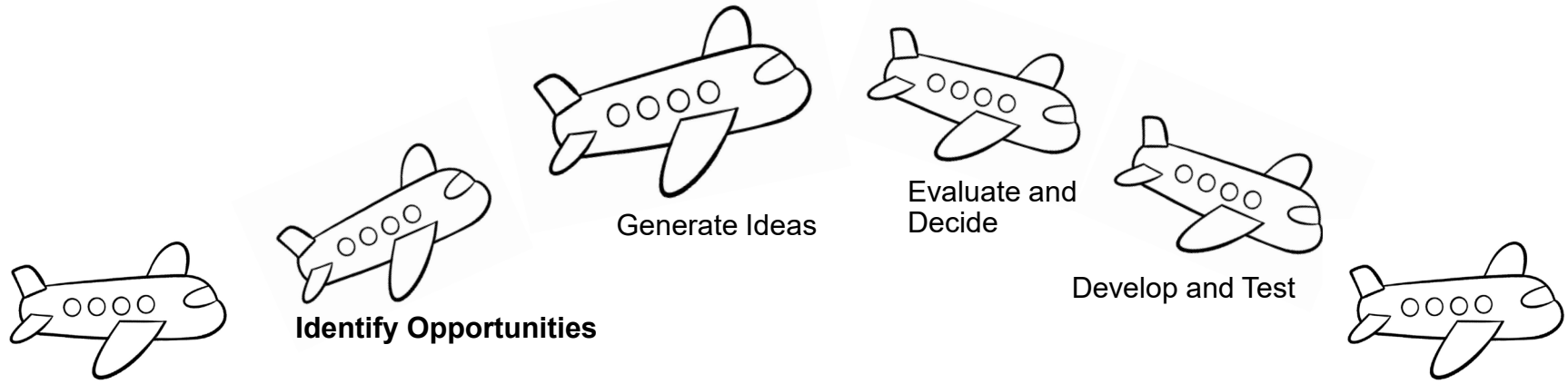


Photo from Articulate 360 Content Library



Identify Opportunities

Problem Statement

Design Thinking

Gap Analysis

Process Approaches

Root Cause

Identify Opportunities

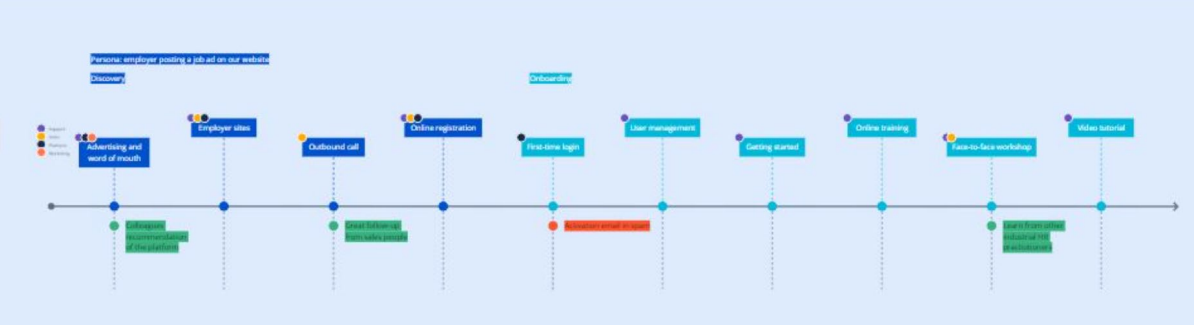
Problem Statement:

- Description of Problem
- Justification for Resolution
- Identify the “Pain” to the Customer
- Define Metrics
- Create Urgency for Stakeholder

Identify Opportunities

Design Thinking: **Empathize and Define**

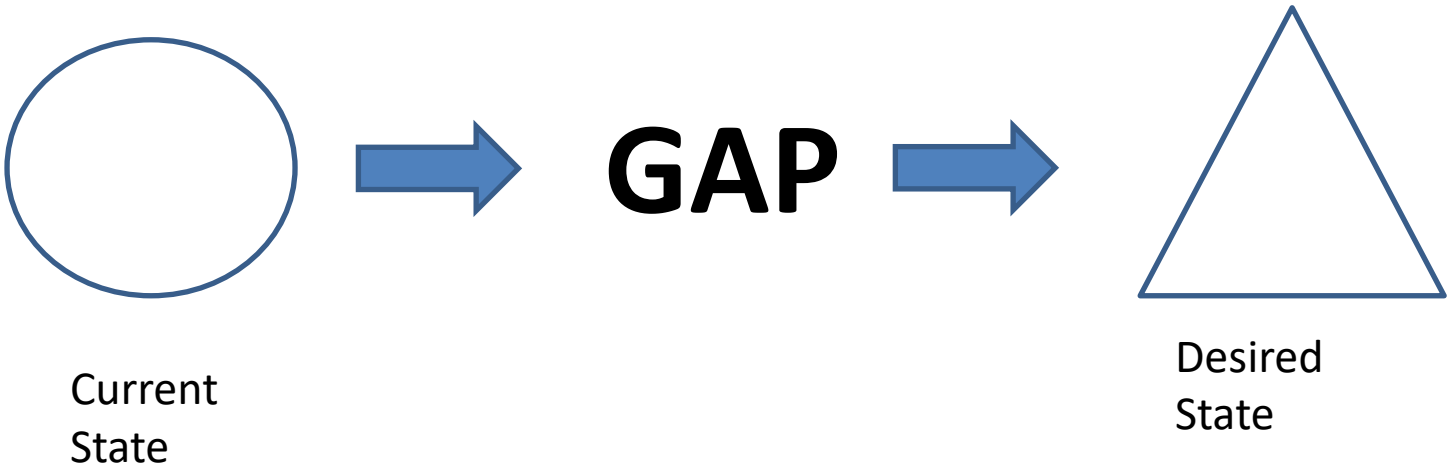
- Interviews
- Personas
- Customer Journey Maps



https://www.innovationtraining.org/design-thinking-exercises-and-activities/

Identify Opportunities

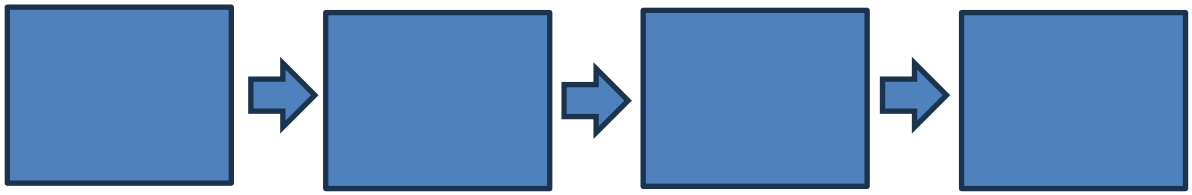
Gap Analysis



Identify Opportunities

Process Approaches

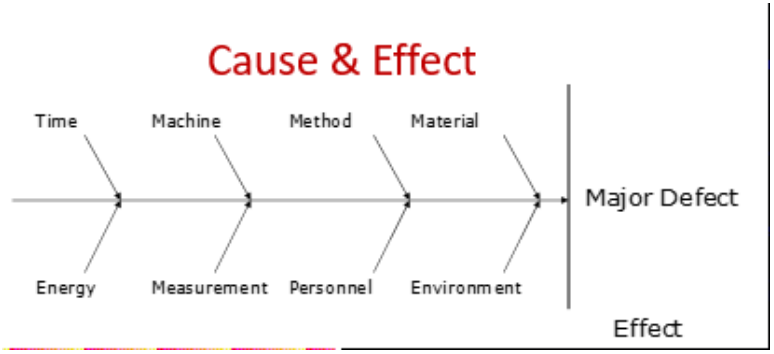
- Process Mapping
- Work Breakdown
- Storyboarding



Identify Opportunities

Root cause analysis

- Root cause is the cause, not a symptom
- Infinite number of causes
- Use tools like Fishbone Diagram or 5 Whys



Generating Ideas

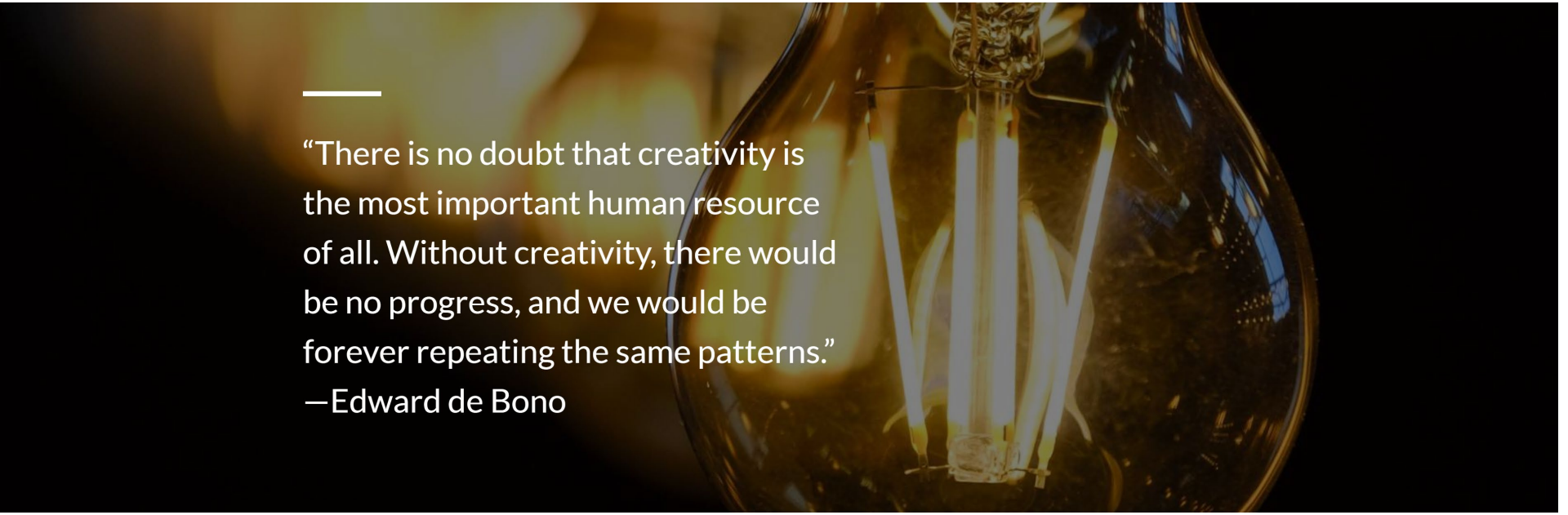
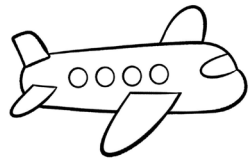
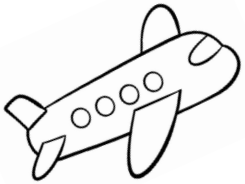


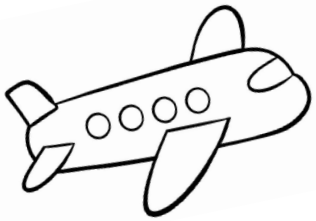
Photo from Articulate 360 Content Library



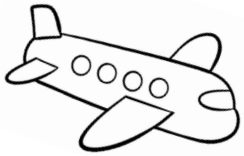
Flight Plan
What, How, Why



Identify Opportunities

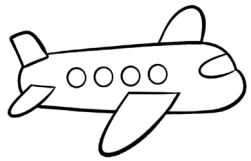


Generate Ideas



Evaluate and
Decide

Develop and Test



Implement

Generating Ideas

- Creative Thinking Process
- Cognitive Traits
- Priming for Creativity

Generating Ideas

Creativity Thinking Process

- Preparation
- Incubation
- Illumination
- Verification

https://www.istockphoto.com/vector/bulb-icon-stock-vector-illustration-flat-design-gm901337994-248663981

Generating Ideas

Cognitive Traits for Creativity

- Divergent Thinking
- Personality
- Open mind
- Be in a Good Mood

- Rethinking is a skill set and mindset

-Adam Grant

Generating Ideas

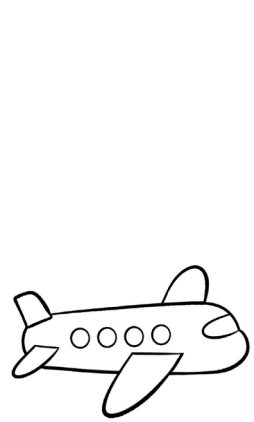
Priming for Creativity

- Clear the Mind
- Set the Stage
- Simple Creative Thinking Activities

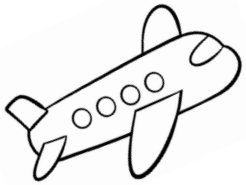
Individual Innovation

"Creativity is seeing what everyone else has seen, and thinking what no one else has thought."
— Albert Einstein

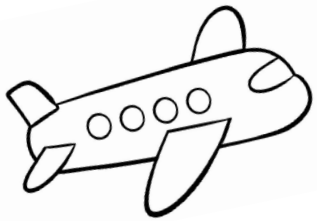
Photo from Articulate 360 Content Library



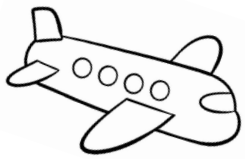
Flight Plan
What, How, Why



Identify Opportunities

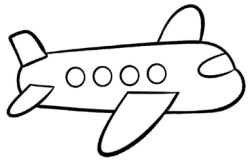


Generate Ideas



Evaluate and Decide

Develop and Test



Implement

Individual Innovation

Preparing

Priming

McGyver Method

Mind Mapping

Recombination

Individual Innovation

Preparation:

- Mindfulness
- Gratitude
- Exercise
- Sleep

Individual Innovation

Priming:

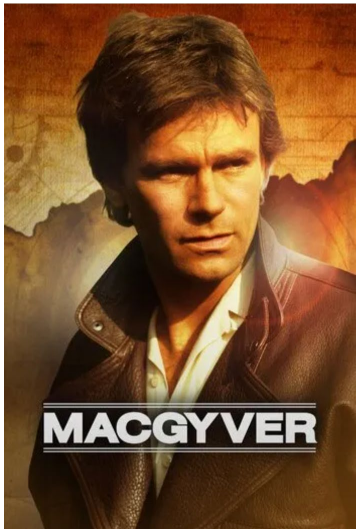
- Be in a Good Mood
- Limit Distractions
- Have a Beginning and End
- Talk a Walk Outside

- Play Word Association
- Make it Complex – not Binary
- Ask More Questions
- – Express Curiosity and Create Variety

Individual Innovation

MacGyver Method

1. Write it down
2. Do something mildly stimulating (take a walk or drive)
3. Free Writing or Mind Mapping



https://tvtropes.org/pmwiki/pmwiki.php/Series/MacGyver1985

Individual Innovation

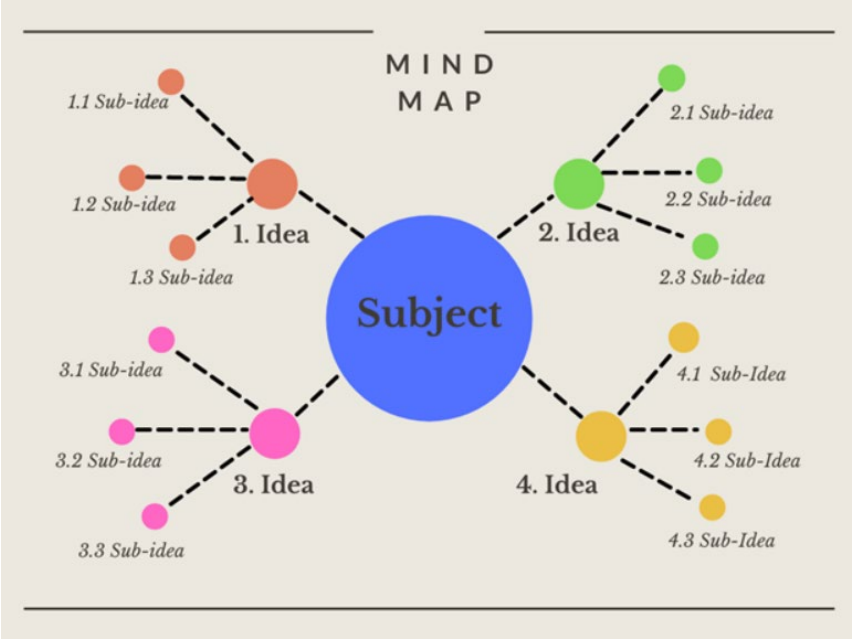
Mind Map

1. Create a Central Idea
2. Add Branches
3. Add Keywords

(use colors)

(use pictures)

(use one word)



https://www.lawpracticetoday.org/article/mind-mapping-a-mental-tool-for-generating-ideas-and-solving-problems/

Individual Innovation

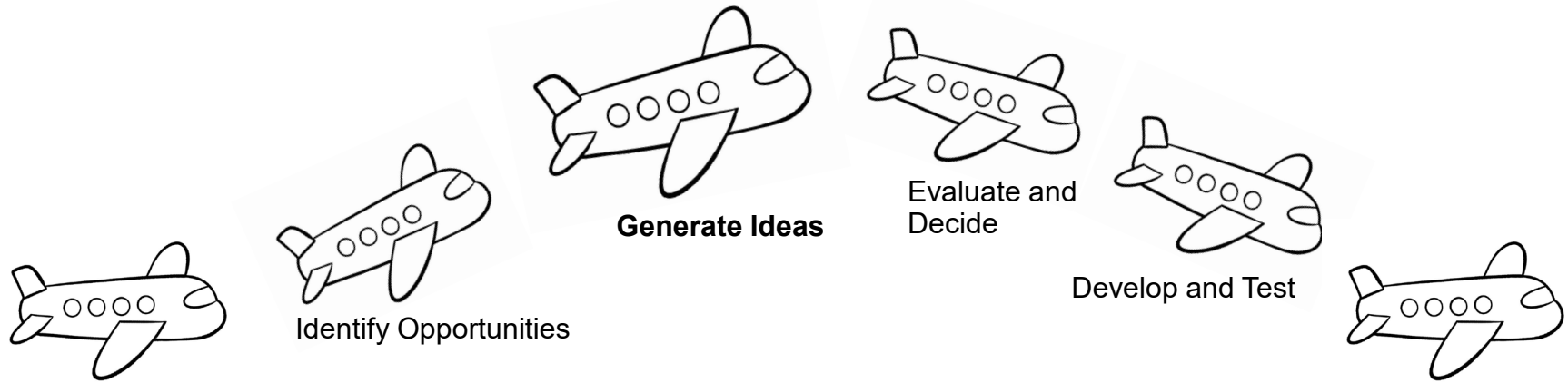
+

=

Recombination

Team Innovation

Photo from Articulate 360 Content Library



Team Innovation

Team Skills for Creativity
Priming

Seven Ways
SCAMPER
Gamification

Getting “Stuck”

Team Innovation

Team Skills for Creativity

- Active Listening
- Knowledge Sharing
- Diverse Thinking
- Safety for Risk Taking
- Build Trust
- Accountability
- Celebrate Wins
- Have Fun

Team Innovation

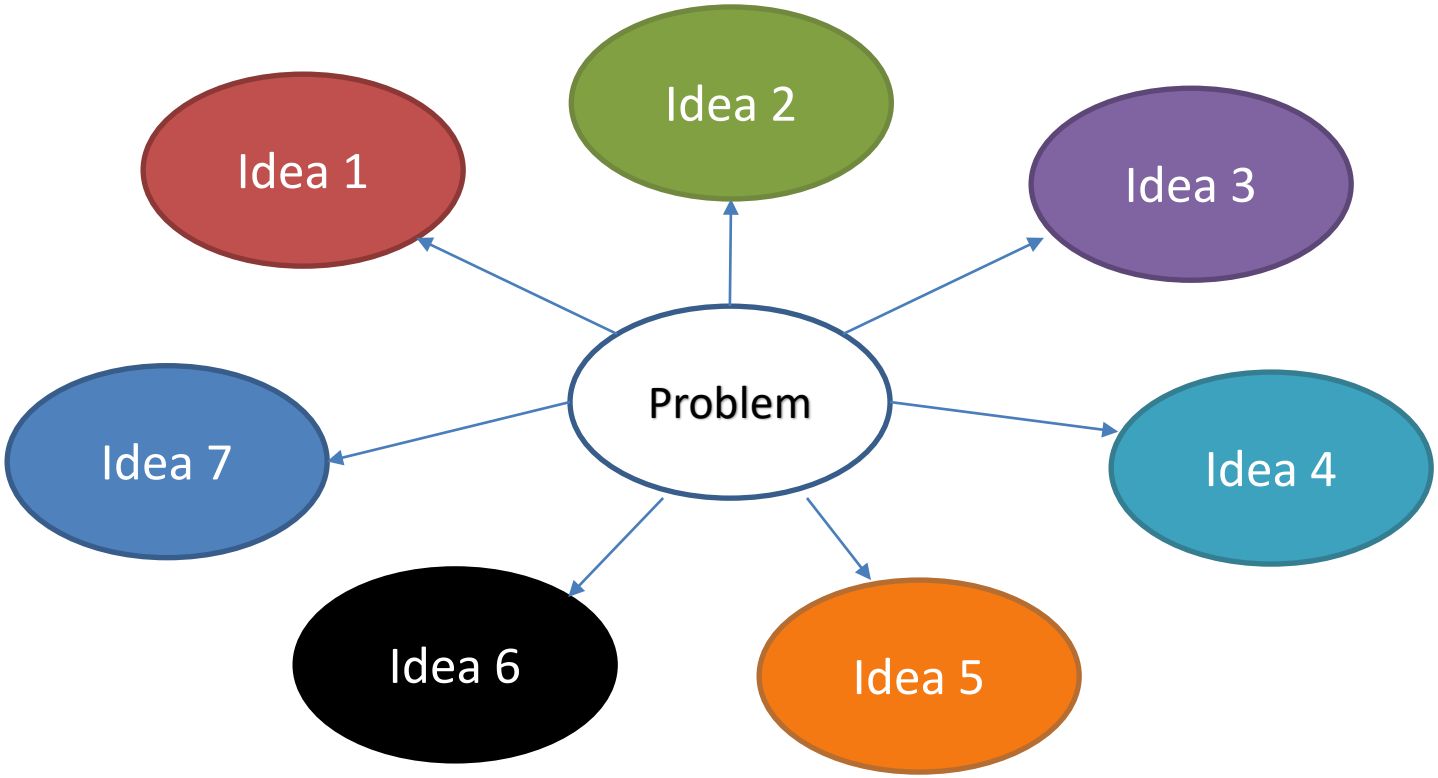
Priming Teams for Creativity

- Yes and…
- What if..
- Alternate Uses
- Counterfactual
- Different Perspective

Team Innovation

7 Ways Brainstorming:

Involve those closest to the process and identify 7 ways of resolving the problem's root cause



Team Innovation

SCAMPER is a Reframing Approach

- Substitute
- Combine
- Adapt
- Modify
- Put to other uses
- Eliminate
- Reverse

Team Innovation

Gamification

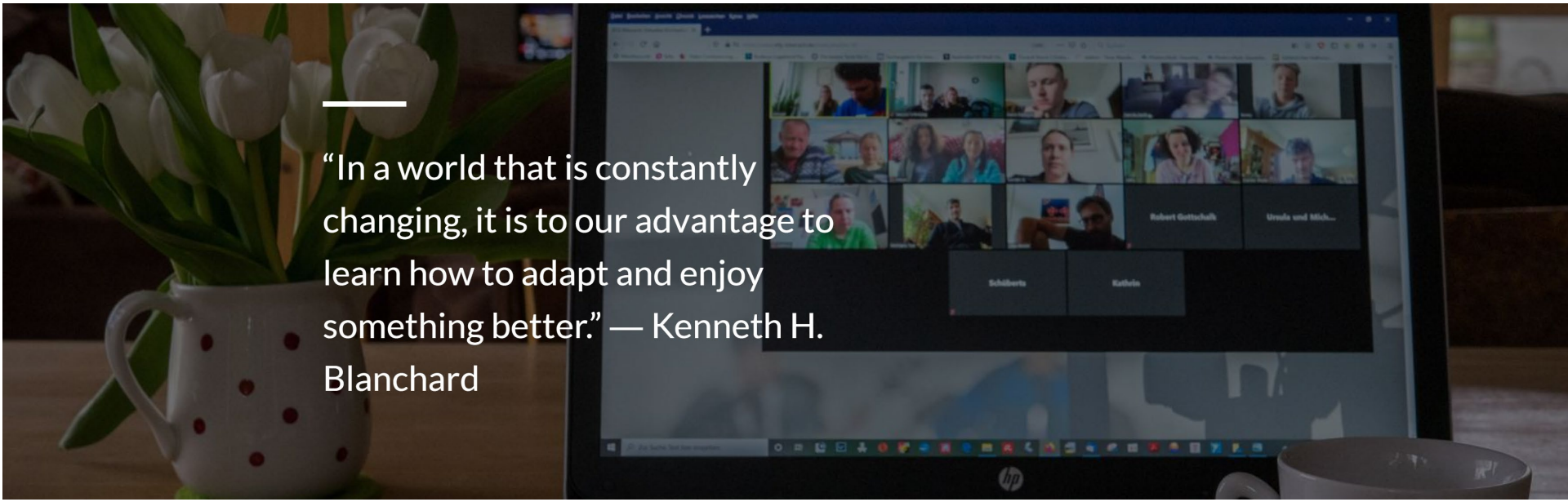
- Reframing the Process
- Creating a Mission
- Build Rules to Promote More Ideas
- Encourage Risks and Mistakes
- Use a Leaderboard

Team Innovation

Things to do if you get stuck:

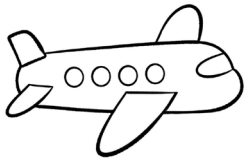
- Reframe or “Tilt the Problem”
- Define Attribute (what, where, when)
- Spilt Hairs
- Random Words
- Fresh eyes
- Watch a funny video

Virtual Teams

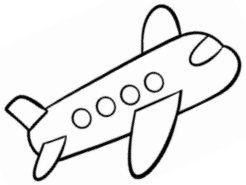


"In a world that is constantly changing, it is to our advantage to learn how to adapt and enjoy something better." — Kenneth H. Blanchard

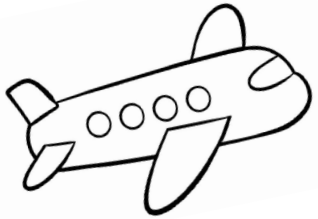
Photo from Articulate 360 Content Library



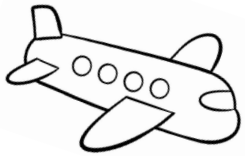
Flight Plan
What, How, Why



Identify Opportunities

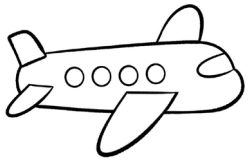


Generate Ideas



Evaluate and Decide

Develop and Test



Implement

Virtual Teams

Challenges of Virtual Teams

Synchronous and Asynchronous

Priming Virtual Teams

Adapting Creative Tool to Virtual Teams

Virtual Teams

Challenges in Virtual Teams

- Communication Barriers
- Technical Issues
- Lack of Non-Verbal Cues
- Harder to Build Trust
- Accountability Challenges
- Feeling Isolated and Disconnected

Virtual Teams

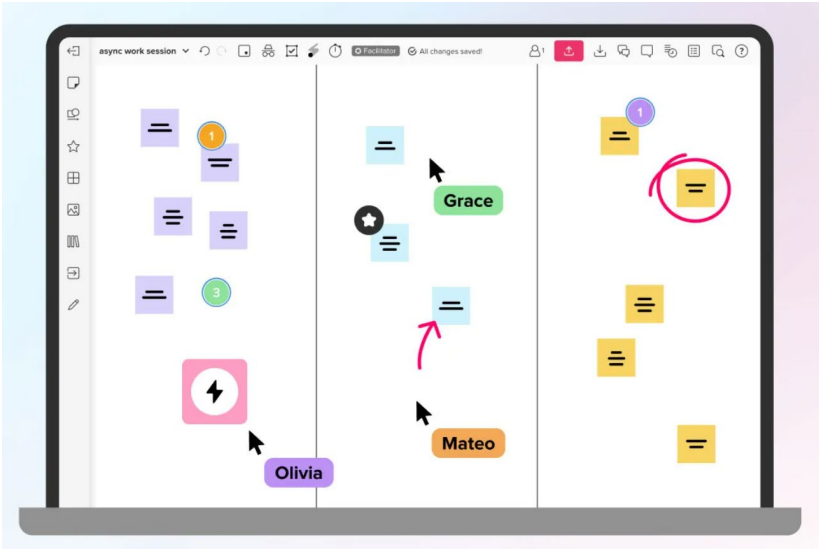
Synchronous Work

Asynchronous Work

Zoom

https://explore.zoom.us/en/accessibility/

Mural



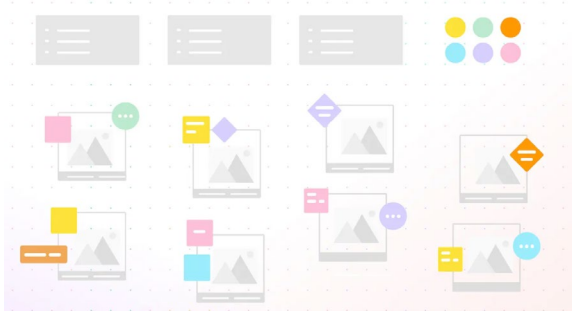
https://www.mural.co/apps

Virtual Teams

Priming Virtual Teams

- Use Virtual Icebreakers
- Adapt Team Priming Approaches

Example: Counterfactual



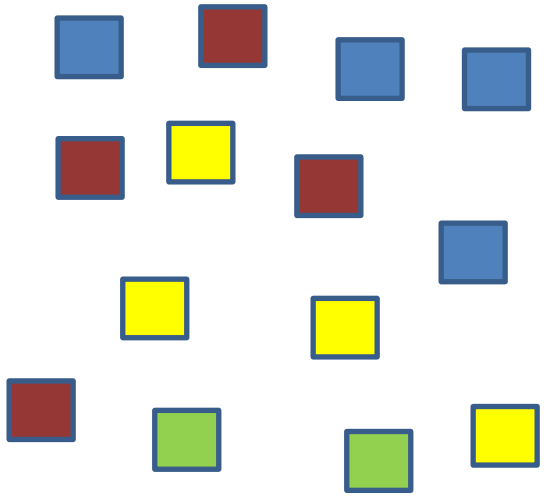
https://www.mural.co/use-case/team-building-and-ice-breakers

What would be my life like..

...if I had joined the circus?

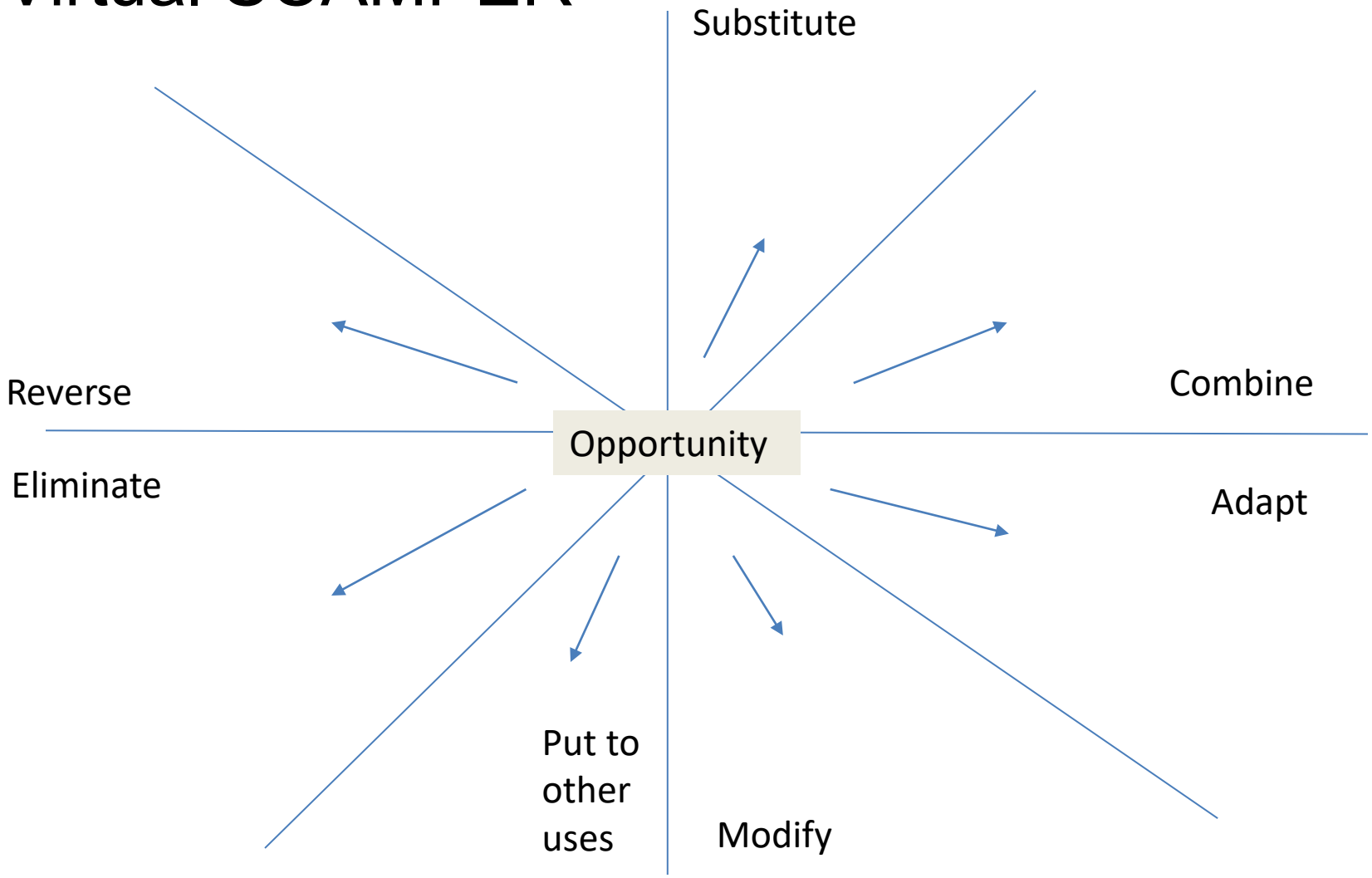
...if I had lived in Antarctica?

...if I had won an Olympic medal?



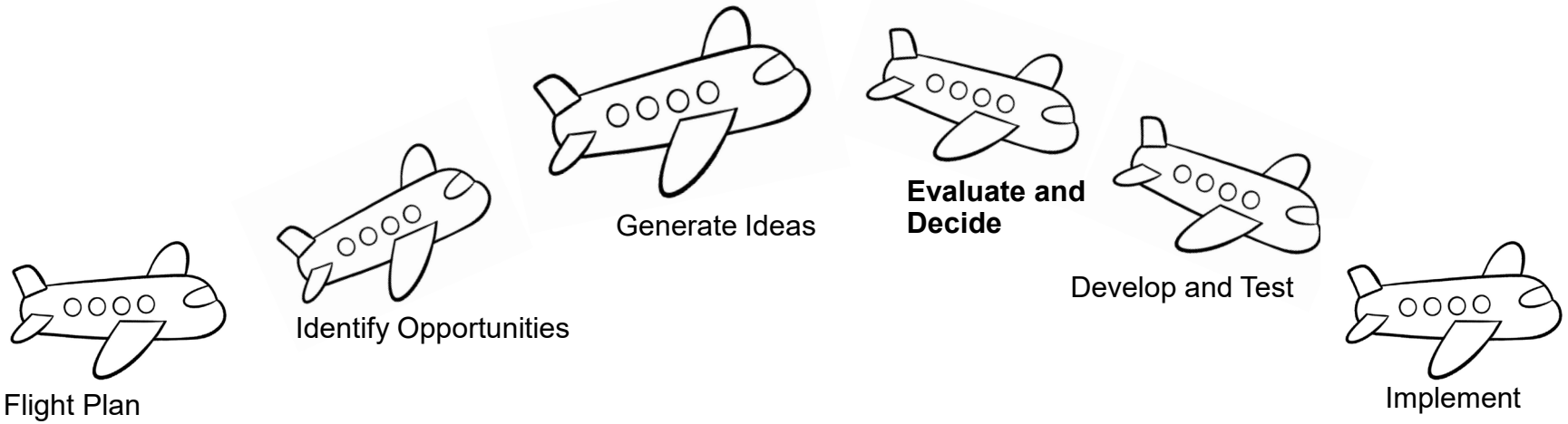
Virtual Teams

Virtual SCAMPER



Evaluation and selection

Photo from Articulate 360 Content Library



Evaluation and selection

Double Diamond Process

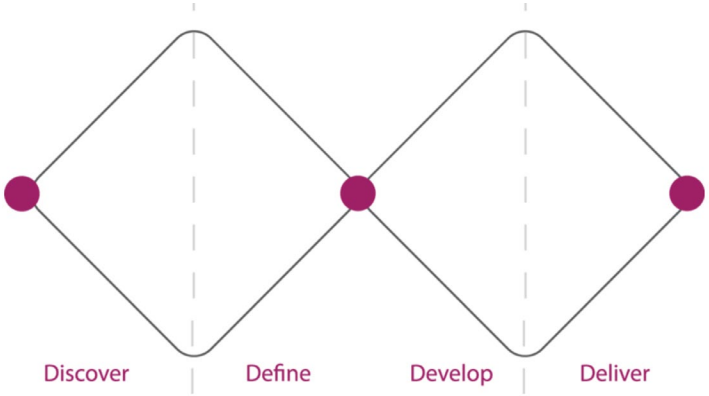
Decision Making Models

Priority Payoff Matrix

Evaluation and selection

Double Diamond Process

- Divergent Thinking
  - Mind mapping or Brainstorming
- Convergent Thinking
  - Voting or Priority Payoff Matrix



The Double Diamond (adapted from British Design Council).

https://www.researchgate.net/figure/The-Double-Diamond-adapted-from-British-Design-Council_fig1_315175992

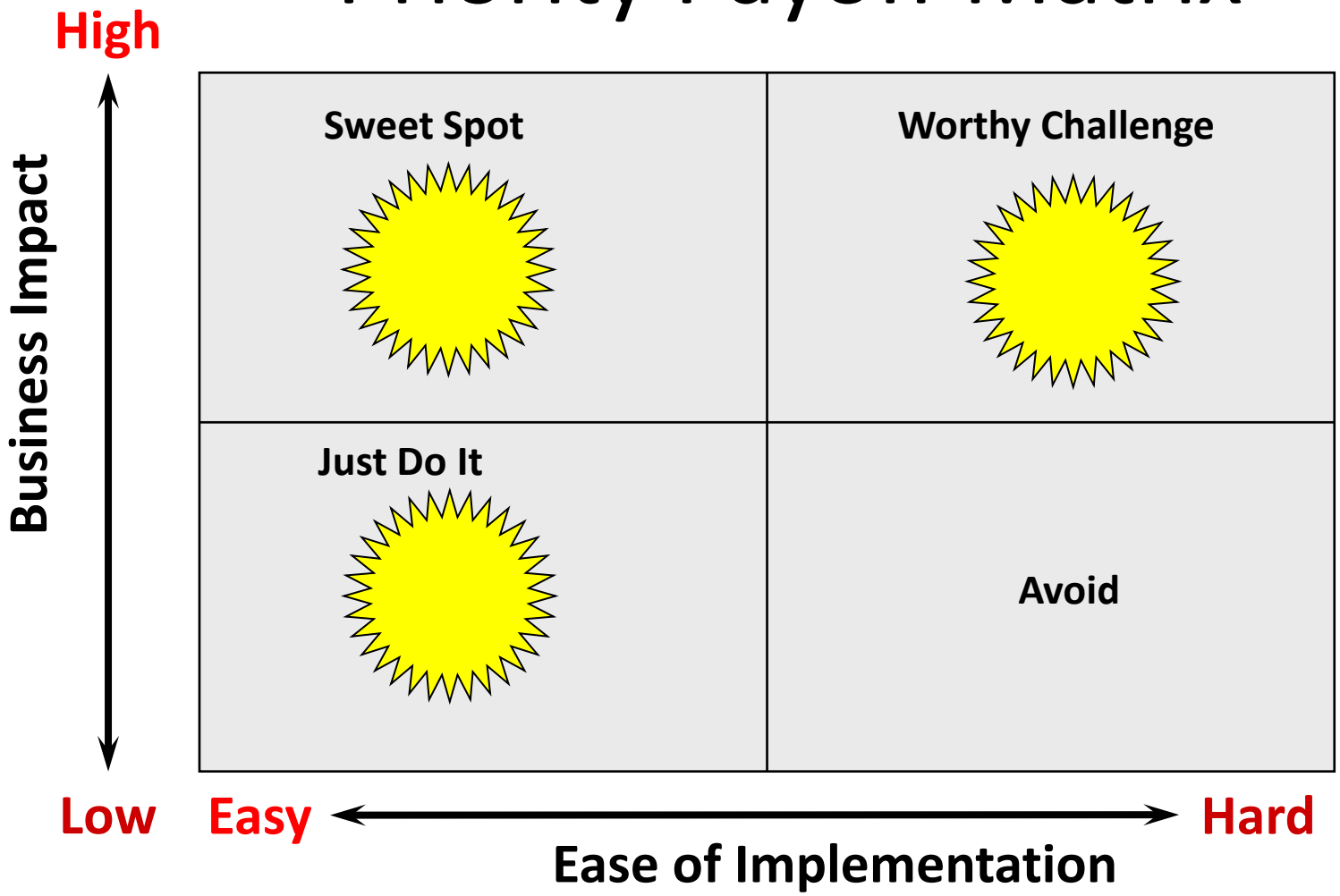
Evaluation and selection

Decision Making Models

Style	Buy In	Decision Time & Effort
Command	Low	Fast/Low
Consultative	Medium	Medium/Medium
Voting – Unanimous	High	Medium/Medium
Voting – Majority	High	Medium/Medium
Consensus	Highest	Long/High

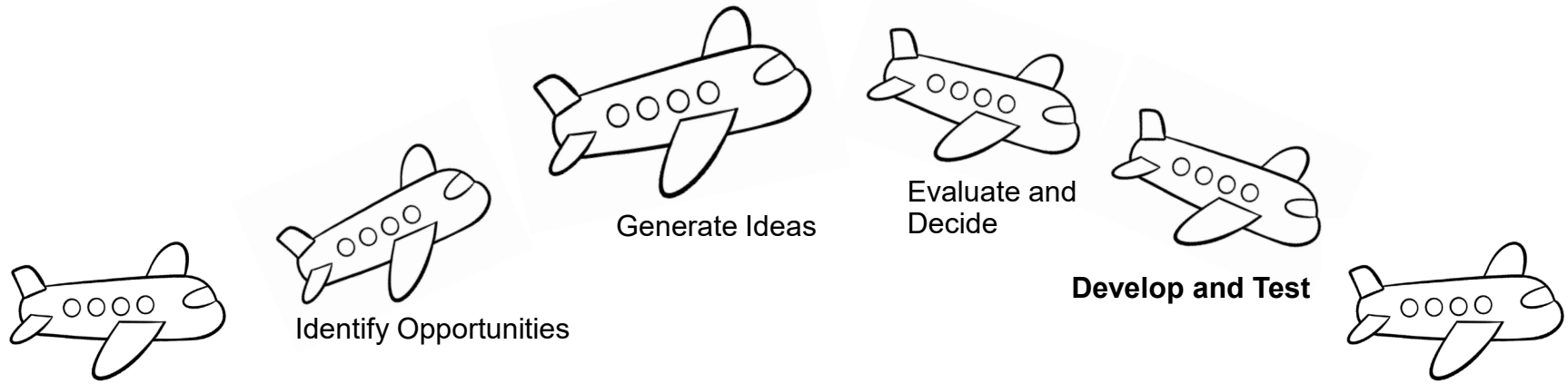
Evaluation and selection

Priority Payoff Matrix



Development and Testing

Photo from Articulate 360 Content Library



Development and Testing

PDCA

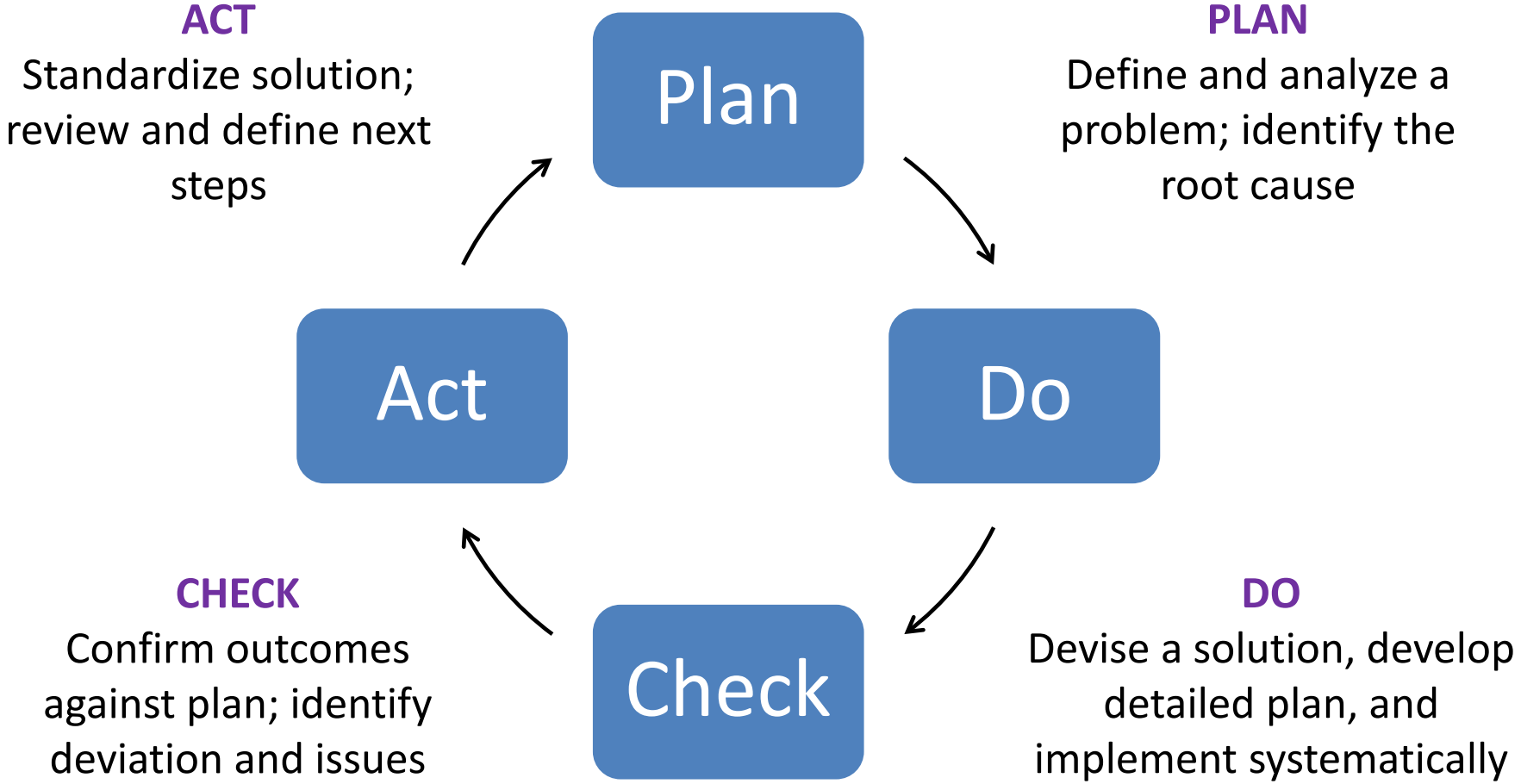
Testing

Conference Room Pilot

3P Process

Prototyping

Development and Testing



Development and Testing

Testing

- Outcomes
- Requirement
- Goals
- Customer

Development and Testing

Conference Room Pilot

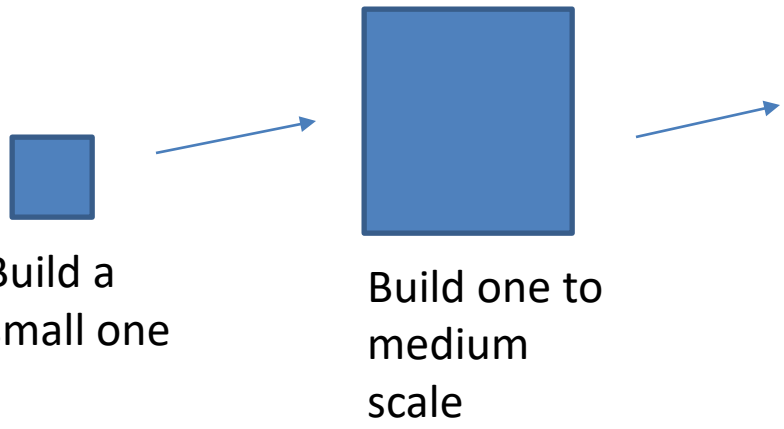
- Role the process
- Simulate process outcomes
- Try Out “What If” scenarios

Photo from Articulate 360 Content Library

Development and Testing

3P Approach
Production Preparation Process

- Scaled Test Process



Construction Begins for Lean Outpatient Center in Southwest Florida, Medical Construction and Design, 2015

Development and Testing

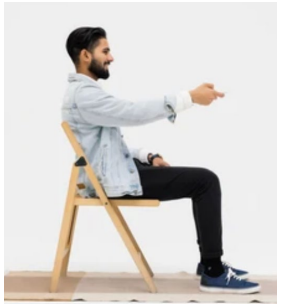
Wireframe
- Sketch or Picture

Mockup
- Build Models

Prototyping:
- Functional Build

https://www.shutterstock.com/search/chair-3d-drawing

https://www.dezeen.com/2013/07/26/scale-paper-chair-by-taiji-fujimori/



https://www.shutterstock.com/search/person-sitting-on-chair-side-view

Implementation

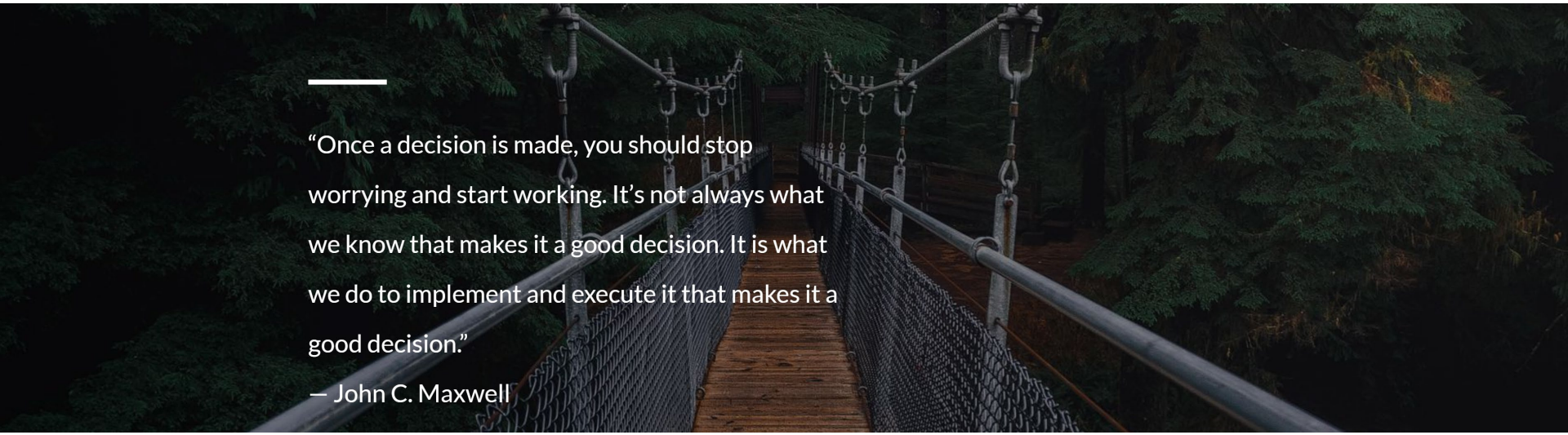
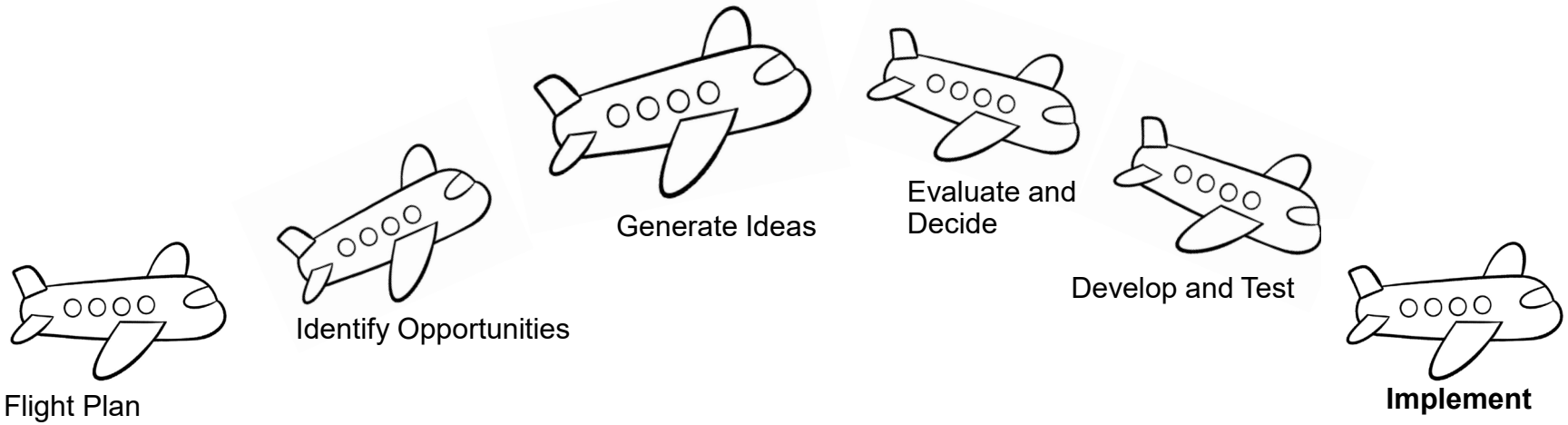


Photo from Articulate 360 Content Library



Implementation

Action Planning

Factors to Build In for Success

Sustainment

Implementation

Action Planning
Example: WWW

What	Who	When

Implementation

Factors to Build In for Success

- Roles
- Resistance
- Costs
- Risk
- Results

Implementation

Sustainment

- Sponsorship
- Metrics of Success
- Recognition and Reinforcement
- Accountability

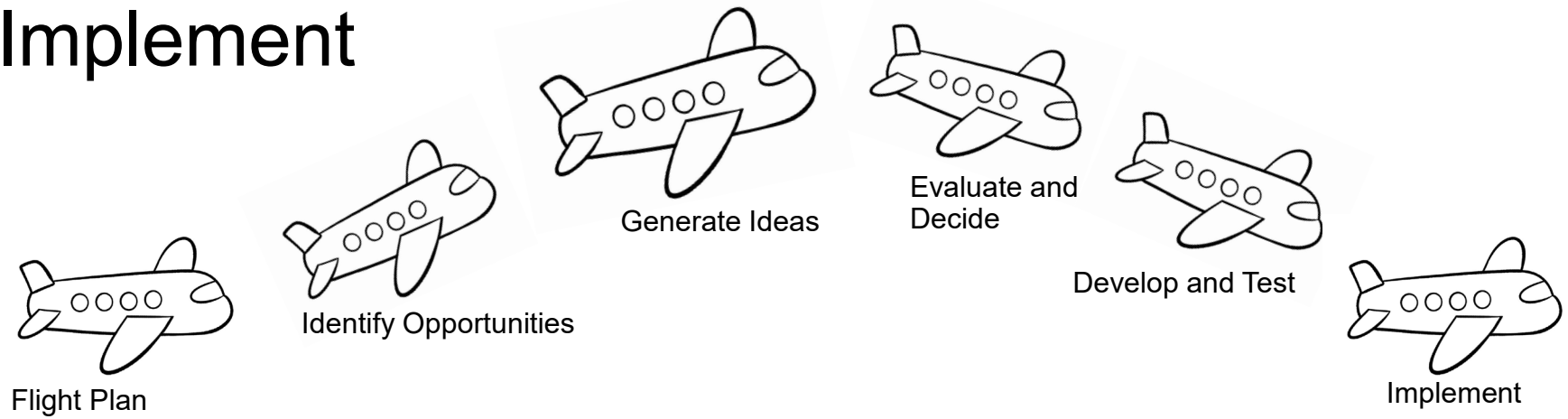
Innovation Recap

Identify Opportunities

Generate Ideas

- Prepare – Prime – Creative Activities

Evaluate and Decide

Develop and Test

Implement